ZyXEL ES-4124 V3.80(AIC.2)C0

Release Note/Manual Supplement

Date: Jan. 27, 2010

This document describes the features in the ES-4124 product for its 3.80(AIC.2)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.80(AIC.2)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.80(AIC.2) | 01/27/2010
BootBase Version: V0.8 | 03/13/2007

Default Bootbase Setting:

ZyNOS Version	V3.80(AIC.2) | 01/27/2010 12:35:54
Bootbase Version	V0.8 | 03/13/2007 10:19:25
Serial Number	xxxxxxxxxxxxxx
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
First MAC Address	0019CB000001
Last MAC Address	0019CB000002
MAC Address Quantity	2
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	44
RomFile Checksum	7550
ZyNOS Checksum	2ee6
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00	

Enhanced Features:

None

Bug Fix:

1. [Hardware Monitor]To change hardware monitor and fan speed.
2. [ITS] Can't login on ES-3124 with Cisco-AVPair
3. [Cluster] The DUT can't be the cluster member in the Cluster function.
4. [DHCP Snooping]DUT pop "no available relayTableEntry" continuously while tester inject a large number dhcp request packets into it.

5. [Tacacs+]DUT will not take correct privilege via SSH.
6. [Radius]DUT will not take correct privilege via SSH.
7. [MRSTP] The MRSTP and Loopguard Function should be conflicted with the per port enable, not global enable.
8. [MSTP] The MSTP Hello Time doesn't work.
9. [Clone] When copy the Port Active setting, the Port status will fail.
10. [Clone] When copy the Port Speed setting, the Port Status will show wrong.
11. [Clone] The Queuing GE-SPQ can't be copied in the Clone function.
12. [CLI] The dhcp snooping limit rate can't be erased when setting "no dhcp-snooping limit rate" command via CLI.
13. [ITS:41689] When using SMB sends 150 sec/packet unknown remote host traffic to the DUT, the DUT will lose the management via Web, ping or telnet, ftp, ssh.
14. [Ethernet] When inactive the comport port (copper and fiber connected to other desive), the opposite device's link port will link up.
15. [Trunk] The mac-flush will fail when learning mac address before enable trunk function.
16. [Trunk] The unicast traffic cannot forwarding to trunk port.
17. [MAX Config] When DUT has the config as attached file and write memory, DUT will hang up.
18. [SNMP] When using SilverCreek to test the dhcpSetup (OID: 1.3.6.1.4.1.890.1.5.8.24.20), DUT will crash and pop "Broadcast domain with vid 16" error message.
19. [Radius]DUT will not stop doing identification when it detected authentication fail.
20. [MRSTP] The MRSTP and Loopguard Function should be conflicted with the per port enable, not global enable.
21. [TRAP]Agent could not received SNMPv3 trap due to L3 DUT generated TRAP via smallest IP address.
22. [IPSG]Vista PC could not access internet in arp inspection when release & renew IP.
23. [IPSG]Vista PC(Static IP) could not access internet in arp inspection after rebooting and starting PC.
24. [IPSG]ARP Inspection Port rate doesn't work when the vlue more than 16.
25. [IPSG]DHCP Snooping Port rate doesn't work when the vlue more than 264.
26. [SNMP] When using SilverCreek to test the ifAdminStatus (OID: 1.3.6.1.2.1.2.2.1.7), it will cause all port link down.
27. [Error Message] When setting the config as attached file and erasing the config, CLI will pop "ERROR: bcm_port_info_get failed: Operation failed" error message.
28. [Ethernet] When inactive or active the Port, CLI will show "ERROR: bcm_port_info_get failed: Operation failed" error message.
29. [Overnigtht] When using 2 PC to receive RMON, Link Down/Up SysLog and SNMPc Trap, ping DUT continuously, repeat get MIB overntght, then show running-config, DUT will crash.
30. [SNMP] The protoBasedVlanSetup (OID :1.3.6.1.4.1.890.1.5.8.24.32) can't be created via SNMPc and using SilverCreek to test the function, DUT will crash.
31. [SNMP Trap] When disabling the trap of the rmon, it still can sent to SNMPc Server.
32. [SNMP] When getting the dot1dTpFdbAddress (OID: 1.3.6.1.2.1.17.4.3.1.1) value, finding some index can't be gotten.
33. [SNMP] When using SilverCreek to test the ifAdminStatus (OID: 1.3.6.1.2.1.2.2.1.7), it will cause all port link down.
34. [Hardware Monitor]The UR internal loopback fail.

Known Issue:

1. Port movement of IP address is not supported currently.
2. A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.
3. Dvmrp didn't support IGMPv3 source filtering & IGMP Port-based

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24

5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	IGMP MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4
10.	Protocol based VLAN entries per port	7
11.	DHCP Server	16
12.	Syslog server entry	4
13.	IP souce guard entry	128
14.	IP subnet based VLAN entry	16

Change History:

V3.80(AIC.2)C0 (01/27/2010)
Fix some critical bugs

V3.80(AIC.1)C0 (11/05/2007)
Fix some critical bugs

V3.80(AIC.0)C0 (04/25/2007)
Support enhanced features

V3.70(AIC.0)C0 (09/19/2006)
Support enhanced features

V3.60(AIC.0)C0 (07/04/2006)
First Public Version

ZyXEL ES-4124 V3.80(AIC.1)C0

Release Note/Manual Supplement

Date: Nov. 5, 2007

This document describes the features in the ES-4124 product for its 3.80(AIC.1)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.80(AIC.1)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.80(AIC.1) | 11/05/2007
BootBase Version: V0.8 | 03/13/2007

Default Bootbase Setting:

ZyNOS Version	V3.80(AIC.1) | 11/05/2007 21:50:31
Bootbase Version	V0.8 | 03/13/2007 10:19:25
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	44
RomFile Checksum	7550
ZyNOS Checksum	19ff
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00	

Enhanced Features:

None

Bug Fix:

1. Enable DVMRP will cause system hang-up.
2. Enable DVMRP will cause memory leak.
3. WEB for TACACS+ and MSTP can't work
4. MAC authentication will cause device unreachable after a period of time.
5. Device will not response ARP under large amount ARP traffic.
6. Device will crash under TCP SYNC attack.
7. Classifier precedence will not follow longest prefix match.

8. SNMP management can't cross routing domain
9. Set authentication uses RADIUS, after login fail about 256 times, the DUT will pop out RADIUS: identifier error, and after 556 times, the DUT will become unreachable.
10. DHCP relay doesn't work in some cases.
11. Set an unreachable RADIUS accounting server, accounting event and authentication login uses RADIUS. After a period of time, the DUT can't login and will pop out *radiusLoginSendToAuthServer*: identifier error.
12. Large amount of L3 direct broadcast traffic will reduce device performance.
13. ARP entries related to trunk ports are not flush when trunk ports link down.
14. Unauthenticated SSH attacking will occupy telnet sessions.
15. Device will crash under TCP DOS attack.
16. The pvid command can not execute.
17. Fix the bug that port security feature work with mac authentication.

Known Issue:

1. Port movement of IP address is not supported currently.
2. A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.
3. Dvmrp didn't support IGMPv3 source filtering & IGMP Port-based

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	IGMP MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4
10.	Protocol based VLAN entries per port	7
11.	DHCP Server	16
12.	Syslog server entry	4
13.	IP souce guard entry	128
14.	IP subnet based VLAN entry	16

Change History:

V3.80(AIC.1)C0 (11/05/2007)
Fix some critical bugs

V3.80(AIC.0)C0 (04/25/2007)
Support enhanced features

V3.70(AIC.0)C0 (09/19/2006)
Support enhanced features

V3.60(AIC.0)C0 (07/04/2006)
First Public Version

ZyXEL ES-4124 V3.80(AIC.0)C0

Release Note/Manual Supplement

Date: Apr. 25, 2007

This document describes the features in the ES-4124 product for its 3.80(AIC.0)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.80(AIC.0)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.80(AIC.0) | 04/25/2007
BootBase Version: V0.8 | 03/13/2007

Default Bootbase Setting:

ZyNOS Version	V3.80(AIC.0) | 04/25/2007 19:43:26
Bootbase Version	V0.8 | 03/13/2007 10:19:25
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	44
RomFile Checksum	7550
ZyNOS Checksum	cf8a
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00	

Enhanced Features:

1. 802.1s MSTP
2. SNMPv3
3. enlarge syslog buffer
4. 802.3ah OAM
5. Multilevel CLI
6. SNMP trap group
7. configurable multicast VLAN
8. independent IGMP snooping and MVR setting
9. enlarge concurrent telnet session
10. IP source guard(Static binding, DHCP snooping, ARP inspection)
11. Two rate three color marking

12. IP subnet VLAN
13. RADIUS MAC login
14. RADIUS accounting
15. TACACS+ authentication
16. TACACS+ accounting
17. IGMPv3
18. IGMPv3 snooping
19. IGMP port-based
20. Loop guard
21. Daylight saving

Bug Fix:

1. After running DVMRP and stopped for about 30 minutes, the traffic can't come back again.
2. The MIB object *dot1dTpFdbPort* will return incorrect port number when the MAC is static assign.
3. When polling with *net-snmp*, it stopped with OID not increasing.
4. Can not restore configuration with space in classifier name.
5. The CLI command for port-based VLAN *egress port* cannot remove CPU port.
6. Switch port cannot link on fixed speed (Auto-negotiation disabled) with crossover cable.

Known Issue:

1. Port movement of IP address is not supported currently.
2. A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.
3. Dvmrp didn't support IGMPv3 source filtering & IGMP Port-based

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	IGMP MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4
10.	Protocol based VLAN entries per port	7
11.	DHCP Server	16
12.	Syslog server entry	4
13.	IP souce guard entry	128
14.	IP subnet based VLAN entry	16

Change History:

V3.80(AIC.0)C0 (04/25/2007)
Support enhanced features

V3.70(AIC.0)C0 (09/19/2006)
Support enhanced features

V3.60(AIC.0)C0 (07/04/2006)
First Public Version

ZyXEL ES-4124 V3.70(AIC.0)C0

Release Note/Manual Supplement

Date: Sept 19, 2006

This document describes the features in the ES-4124 product for its 3.70(AIC.0)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.70(AIC.0)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.70(AIC.0) | | 09/19/2006
BootBase Version: V0.7 | 02/17/2006

Default Bootbase Setting:

ZyNOS Version	V3.70(AIC.0) | 09/19/2006 18:34:35
Bootbase Version	V0.7 | 02/17/2006 11:56:33
Vendor Name	ZyXEL
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	03
RomFile Checksum	eb4b
ZyNOS Checksum	2e65
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00	

Enhanced Features:

1. MRSTP
2. Multicast routing on MVR
3. Administration user management
4. RADIUS enhancement (for 802.1x enhancement and multiple radius servers)
5. IGMP enhancement (timer and priority)
6. Web enhancement (Select all and Clone)
7. OSPF enhancement (passive interface and interface priority)

Bug Fix:

None

Known Issue:

1. Port movement of IP address is not supported currently.
2. A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	IGMP MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4
10.	Protocol based VLAN entries per port	7
11.	DHCP Server	16
12.	Syslog server entry	4

Change History:

V3.70(AIC.0)C0 (09/19/2006)
Support enhanced features

V3.60(AIC.0)C0 (07/04/2006)
First Public Version

ZyXEL ES-4124 V3.60(AIC.0)C0

Release Note/Manual Supplement

Date: Jul 04, 2006

This document describes the features in the ES-4124 product for its 3.60(AIC.0)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.60(AIC.0)C0 supports models: ZyXEL ES-4124

Version:

OS Version: V3.60(AIC.0)C0 | 07/04/2006
BootBase Version: V0.7 | 02/17/2006

Default Bootbase Setting:

ZyNOS Version	V3.60(AIC.0) | 07/04/2006 18:06:59
Bootbase Version	V0.7 | 02/17/2006 11:56:33

Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	E6
RomFile Checksum	fc40
ZyNOS Checksum	17dd
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 00 00 00-00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00-00 41 13 00 00 00	

Features:

1. 24 ports Auto MDI/MDI-X 100Mbps and 4 ports Auto MDI/MDI-X 1000Mbps compliant with IEEE802.3u/x/ad
2. 2 ports Mini GBIC 1000Mbps compliant with IEEE802.3x/ab
3. MAC address learning
4. Support IEEE 802.1D transparent bridge
5. Support IEEE 802.1Q tagged VLAN
6. Support Port-based VLAN
7. Support IEEE 802.1X
8. Support IEEE 802.1W
9. Support IEEE 802.3AD
10. Support GVRP
11. IGMP snooping
12. Support IEEE 802.1p
13. Automatic age out
14. Specific MAC addresses forwarding per port
15. MAC Filtering
16. Port Trunking
17. Port Mirroring
18. Filtering/Mirroring by L2/L3/L4 rules
19. Bandwidth control by L2/L3/L4 rules
20. Egress traffic shaping per port
21. Broadcast Storm Control
22. Support Strict Priority and WRR queuing method
23. Static IP management or dynamic IP(DHCP client)
24. Multiple IP address management
25. Firmware upgrade and configuration backup/restore.
26. Remote manageable.
27. Cluster Management
28. WEB manageable
29. Support RFC-1213 MIB II
30. Support RFC-1493 Bridge MIB
31. Support RFC-1643 Ethernet MIB
32. Support RFC-1757 Four group of RMON
33. Support RFC-2674 VLAN MIB
34. NEW CLI supported
35. System configuration backup / restore in text-mode
36. Multiple login supported
37. Radius management authentication

38. Hardware Monitor
39. External power backup for internal power module failure
40. SSH v1/v2
41. SSL
42. Multicast
43. MVR
44. IGMP Filtering
45. CIR & PIR
46. MAC Freeze
47. Intrusion Lock
48. Support private MIB
49. Support Syslog
50. Protocol-based VLAN

Known Issue:

1. In some circumstances, packets may route to blocking port of the other device when use Spanning Tree Protocol for redundant purpose between two devices. Recommend using Link Aggregation instead.
2. Port movement of IP address is not supported currently.
3. Discard destination MAC on filter rule, but the same source MAC packet still be filtered.

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4

Bug Fix:

Change History:

V3.60(AIC.0)C0 (07/04/2006)
First Public version

Firmware Upgrade:

The ES-4124 uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example, ftp.exe in Windows) to upgrade ES-4124. The upgrade procedure is as follows:

Upgrade ES-4124 FW:

```
C:\> ftp <ES-4124 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 360AIC0C0.bin ras
ftp> bye


Where
```

- User name : just press <Enter>
- Password : the management password, 1234 by default
- 360AIC0C0.bin : the name of firmware file you want to upgrade
- ras : the internal firmware name in ES-4124